

REMARKS

Applicant thanks the Examiner for the thorough consideration given the present application. Claims 1-15 are currently being prosecuted. The Examiner is respectfully requested to reconsider the rejections in view of the Amendments and Remarks as set forth hereinbelow.

CLAIM FOR PRIORITY

It is gratefully acknowledged that the Examiner has recognized the Applicant's claim for foreign priority. Because the Applicant's claim for foreign priority has been perfected, no additional action is required from the Applicant at this time.

DRAWINGS

The Examiner has not approved the Formal Drawings submitted by the Applicant. It is respectfully submitted that the drawings comply with the requirements of the USPTO. If the Examiner has any objections to the Formal Drawings he is respectfully requested to contact the undersigned as soon as possible so that appropriate action may be taken. No further action is believed to be necessary at this time unless the undersigned receives a notice from the Examiner.

ACKNOWLEDGMENT OF INFORMATION DISCLOSURE STATEMENT

The Examiner has acknowledged the previously filed Information Disclosure Statement. An initialed copy of the PTO-1449 has been received from the Examiner. No further action is necessary at this time.

ELECTION/RESTRICTION

Regarding the previous election of Species A, Figs. 1, 7 and 8, and that claim 1 is generic, the Office Action indicates that this is not persuasive because the recited claim 1 does not read on all Species A-E, e.g. "a contact layer." Therefore, the Office Action indicates the recited feature "a contact layer" is withdrawn from further consideration. However, it is respectfully noted the contact layer is shown in Fig. 1 in which the conductive metal particles 10 having the embedded carbon nanofibers or carbon nanotubes 14 form a contact layer of the

electrical contact member through which current flows. That is, Fig. 1 illustrates the metal particles 10 having the fibers 12, 14 contacting another layer (not numbered) through which current flows. Accordingly, it is respectfully submitted independent claim 1 is generic because it reads on all species A-E.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 6 and 9 stand rejected under 35 U.S.C. § 102(b) as anticipated by Stephens. This rejection is respectfully traversed.

Amended independent claim 1 includes a combination of elements and is directed to an electrical contact member includes at least one from conductive metal particles and conductive metal fibers, and carbon nanofibers or carbon nanotubes embedded at least partially into the at least one from the conductive metal particles and the conductive metal fibers such that at least a portion of the carbon nanofibers or the carbon nanotubes protrudes from outer circumferential surfaces of the at least one from the conductive metal particles and the conductive metal fibers. Further, the at least one from the conductive metal particles and the conductive metal fibers having the embedded carbon nanofibers or the carbon nanotubes form a contact layer of the electrical contact member through which current flows.

These features are supported at least by Figs. 1 and 2 and the corresponding description in the specification. For example, Fig. 1 illustrates an electrical contact member including at least one from conductive metal particles (10) and conductive metal fibers (12), and carbon nanofibers or carbon nanotubes (14) embedded at least partially into the at least one from the conductive metal particles (10) and the conductive metal fibers (12) such that at least a portion of the carbon nanofibers or the carbon nanotubes (14) protrudes from outer circumferential surfaces of the at least one from the conductive metal particles (10) and the conductive metal fibers (12). Further, the at least one from the conductive metal particles (10) and the conductive metal fibers (12) having the embedded carbon nanofibers or the carbon nanotubes (14) form a contact layer of the electrical contact member through which current flows.

The Office Action indicates Stephens discloses an electrical contact member having outer surfaces which have been modified with carbon nanotubes. However, it is respectfully noted

Stephens merely teaches different structures for carbon nanotubes. Stephens does not teach or suggest carbon nanofibers or carbon nanotubes embedded at least partially into conductive metal particles/fibers such that at least a portion of the carbon nanofibers or the carbon nanotubes protrudes from outer circumferential surfaces of the conductive metal particles/fibers.

Accordingly, it is respectfully submitted independent claim 1 and each of the claims depending therefrom patentably define over the Stephens.

Claims 1, 6 and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Masashi et al. This rejection is respectfully traversed.

It is respectfully noted the effective filing date of the present application is November 26, 2003, in which the International application was first filed. Further, the publication date of Masashi et al. is January 29, 2004, which is after the effective filing date of the present application. Therefore, Masashi et al. is not a valid reference under 35 U.S.C. §§ 102(a) or (b). Accordingly, it is respectfully requested this rejection be withdrawn.

CONCLUSION

In view of the remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner, either alone or in combination.

Since the remaining patents cited by the Examiner have not been utilized to reject the claims, but to merely show the state of the art, no comment need be made with respect thereto.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of the application, the Examiner is invited to telephone David A. Bilodeau, Reg. No. 42,325 at (703) 205-8072 in the Washington, D.C. area.

Application No. 10/534,248
Amendment filed October 5, 2006
Reply to Office Action of July 5, 2006

Docket No.: 0038-0456PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: October 5, 2006

Respectfully submitted,

By 

James M. Slattery

Registration No.: 28,380

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant

for

43,362